

Impact of Sensory Processing Preferences on First-Year College Students' Success

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PURPOSE: The transition period from high school to college is challenging for all students and may be more difficult for those with sensory processing patterns that differ from most. This study sought to examine the impact of sensory preferences on the student success of first year college students. Research Questions: (1) Do the sensory processing preferences of first year college students impact their GPA? (2) What are the experiences related to student success of first year college students who do not score similar to most people on the Adolescent/Adult Sensory Profile? Variables: Sensory preferences, as measured by the AASP, and GPA are the quantitative variables. Qualitative phenomena included student success and lived experiences.

DESIGN: This study was a mixed methods design and utilized convenience sampling; data was gathered through the AASP, student's GPA, demographic surveys, and semi-structured interviews. All students enrolled in a freshman seminar course at Dominican College were invited via email and by their professors to participate in this study. Quantitative data was analyzed using Mann-Whitney U tests to assess differences in GPA between groups. Statistical data was further analyzed using IBM SPSS Statistics for Windows (Version 26.0). For the qualitative portion, themes were extracted from the participant interviews and findings were coded. Member checking, peer debriefing, and reflexivity was used to increase rigor and validity within this study.

METHOD: Participants completed the informed consent, demographic survey, and the AASP online. After completing the Adolescent/Adult Sensory Profile (AASP), participants who scored outside the ranges of similar to most people were invited to participate in a follow up interview. Three participants responded to the follow up emails and consented to participate in an interview over Zoom.

RESULTS: No differences were found in GPA between students who scored similar to most and those who did not on the AASP ($U = 197, p = .311$ to $U = 268.5 p = .914$). Thus, the alternative hypothesis was rejected and the null hypothesis was accepted. However, 90.3% of participants scored outside similar to most on the AASP. Four common themes emerged from the lived experiences that further expressed the differences in sensory preferences: (1) Environment, which included both physical and social environments, (2) transition from high school to college (experiences of the transition and adjustment), (3) COVID-19 (the effect the pandemic had on an already difficult transition period), and (4) sensory preferences.

CONCLUSION: Despite not finding clinical significance regarding the impacts of sensory processing patterns on student success and GPA, the fact that the majority of participants (90%) scored outside the ranges of similar to most people on the AASP points to the fact that students are entering college with a wide range of sensory preferences. In order to support the success of all students, colleges must provide students flexible support to meet their needs within the environments in which they live, learn and study. The shared experiences of the students who were interviewed illustrates a need for colleges to provide support services to all freshmen in developing healthy habits and routines during the challenging transition into college.

IMPACT STATEMENT: 90% of college freshmen scored outside the ranges of similar to most people on the Adult Sensory Profile. To encourage student success, colleges need to provide options to support the sensory needs of students in the environments in which they live, learn and socialize.

References

- Ayres, A. J. (2005). *Sensory integration and the child*. Los Angeles: Western Psychological Services. (Original work published 1976)
- Bailliard, A. L., & Whigham, S. C. (2017). Linking neuroscience, function, and intervention: A scoping review of sensory processing and mental illness. *American Journal of Occupational Therapy, 71*(5), 7105100040. <https://doi.org/10.5014/ajot.2017.024497>
- Bar-Shalita, T., Vatine, J.-J., & Parush, S. (2008). Sensory modulation disorder: a risk factor for participation in daily life activities. *Developmental Medicine and Child Neurology, 50*(12), 932–937. <https://doi.org/10.1111/j.1469-8749.2008.03095>
- Chiang, W.-C., Tseng, M.-H., Fu, C.-P., Chuang, I.-C., Lu, L., & Shieh, J.-Y. (2019). Exploring Sensory Processing Dysfunction, Parenting Stress, and Problem Behaviors in Children With Autism Spectrum Disorder. *American Journal of Occupational Therapy, 73*(1), 7301205130. <https://doi.org/10.5014/ajot.2019.027607>